

REFEREED ARTICLE

A Study on a Side Effect of Employment Policy on Social Capital in Philippine Villages

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I . Introduction

Participatory development ¹⁾ is now one of the central concepts of development studies on developing countries, after the economic oriented development had been so. Especially after the World War II until 1960s, trickle-down theory (hypothesis) was the strong belief to make the poor richer from the benefit that economic pies in countries get bigger. What has been seen there was modernization, that is, transition from traditional society to mass consumption society with development ignoring human (Kaku 1994). But in many parts the gap between the rich and the poor has gotten wider. Since 1970s, the thought has become the mainstream to improve the quality of life of the poor directly in developing countries, not from the benefit of the rich according to trickle-down theory. To do so, it is essential to put the poor first (Chambers 1983). This thought led to the concept of Basic Human Needs (BHN) and human development (Nishikawa 2000). Compared to material oriented development induced by over stressing economic development, the base of these concepts is referred to as human oriented development (Chambers 1995, Sato 2003). Not only the practical field, but also the academic field has taken great attention to participatory process, as seen in many studies (for example, see Saito 2002, Sato 2003, Ohama 2007).

Even though participatory development is thought as important and should be promoted, the past events affect the present condition and the field of participatory development is not exceptional. In many cases, history is matter (Pierson 2004). Modernization in developing countries especially after the World War II has induced changes of traditions in rural villages, such as their mutual support systems ²⁾ (Onda 2006). At the same time, in some parts, many villagers had started to be employed. Not only modernization (Kakuta 1994, Onda 2006), but starting to be employed is also a trigger of decline of traditional mutual support ³⁾. As Lin (2001) puts it, interaction between residents enables to keep and regenerate social capital which includes trust (definitions of social capital by previous studies are introduced and its definition in this paper is discussed later). This kind of mutual support systems is one of the typical interactions. And it goes without saying that trust among residents is essential to promote residents' voluntary participation. The question raised here is whether these prior modernization and employment policies have changed the ground on which participatory development relies, that is, social capital.

II. Objective of the Study

Against the background in the previous section, however, there are few practical studies showing that decline of mutual support systems in rural areas diminishes trust among residents which is essential for participatory development. In the case of Japan, Uebuchi (2005) shows positive correlation between the norm of mutual support and trust in general people in rural villages. Yet this study does not show the causality between them. It is a new finding to show the clear causality from decline of mutual support to trust in other villagers. This study shows one of its cases by demonstrating that decline of traditional mutual support caused by an employment policy has diminished trust in other residents in three villages in the Philippines. The study also contributes to understand social capital in detail by focusing on 'particularized trust' on villagers, with attention to experience of frequent mutual support as defined later. To do so, the study tries to demonstrate a mechanism shown in Figure 1, where an employment policy diminishes traditional mutual support systems (hypothesis 1), and lack of experience of the frequent mutual support (interaction) brings about decline of residents' trust in other residents (hypothesis 2).

The study focuses on three villages in the Philippines. Historically, Filipino has been experiencing many natural disasters affecting their life and forcing them to accept changes frequently. The attitude created in Filipino spirit by this situation was tendency to accept changeable life (Steinberg 2000). It is expected that influence of the employment policy on Filipino mentality will be shown more clearly than other peoples, because of this attitude inhering in their spirits. This is the reason why this study focuses its target on Filipino.

The following sections discuss social capital including trust and traditional mutual support systems, and the detail results of the case studies.

III. Definition of Social Capital in This Study

This section introduces social capital as main concept treated by this study. As social capital is a mixed concept, the study focuses on two of its aspects: trust and mutual support systems.

1. Social capital

Social capital is discussed in a variety of disciplines and many kinds of their themes. Roughly, social capital is discussed mainly from two viewpoints (Grootaert, Narayan, Jones & Woolcock 2003). The first, discussed by Lin (2001), Burt (1995) and so on, is to consider social capital as 'resource which individual can get through social network.' This thought defines social capital as resource which individual cannot get by oneself, such as objects, information, mental support. Another one, discussed by Putnam (1993, 2000), defines social capital as 'network, trust and norms like reciprocity which increase effectiveness of societies by activating collective actions.' From the viewpoint of the latter definition, resource which is defined as social capital by the former means outcome of social capital.

This study follows the latter definition and refers to social capital as 'trust and reciprocity which increase effectiveness

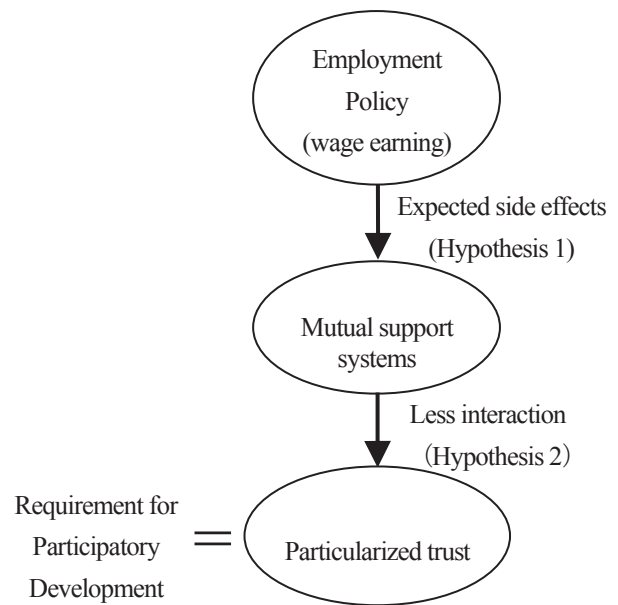


Figure 1: A model assumed in this study

Note : the right side in the figure indicates a model shown in the study; the arrows mean causalities

of societies by activating collective actions.’ It is mainly because the study focuses on cognitive aspect of social capital and does not discuss its outcomes. Discussed below are two components of social capital: ‘particularized trust’ and ‘reciprocity (mutual support systems)’ in the Philippines’ in detail.

2. Particularized trust

Trust is divided into three categories: information-based (strategic) trust, generalized (moralistic) trust and particularized trust (Uslaner 2002, 2003, Yamagishi 1998). Information-based trust means trust in those whom *A* (person) knows already and decide to trust according to their personalities, their past behaviors. It is the trust which *A* gains from her/his daily experiences and it reflects her/his immediate experience. Generalized trust means trust in people in general or in strangers especially people who are different from *A*. It cannot come from interaction with people whom *A* knows. *A* learns it early in life, from her/his parents, and it is largely stable throughout her/his life. It does not depend upon her/his experiences (Uslater 2011). And particularized trust is trust in people like *A*. It may stem from direct experience or from stereotypes (Uslaner 2002, 2003, Yamagishi 1998). In other word, particularized trust refers to generalized trust in some type or category of people acquired from direct experience with such the type of people and keep without change as a stereotype. It infers that particularized trust would change as generalized trust does rather than information-based trust. Therefore, the hypothesis 2 is to verify if particularized trust changes as generalized trust does and focuses on difference in experience of frequent mutual support among residents.

To promote participation from many residents, particularized trust in residents in the same jurisdiction is important, inasmuch as, for example, tribe meetings and activities would have villagers who do not know each other and have to cooperate together. In this situation, particularized trust in other residents would promote residents’ participation and cooperation. However, there seems no study tackling on how long particularized trust keeps and how it declines with a case study.

3. Bayanihan, one of the traditional mutual supports in the Philippines

Bayanihan, one of the traditional mutual supports in the Philippines, means labor exchange. Bayanihan originates from the Philippine tradition that residents support other residents to move their wooden houses. Then its meaning has been expanded to corporation in agriculture and any kinds of labour exchange (Labonne 2008) (the meanings are various according to villages but in the target villages of this study, Bayanihan means “labour exchange”). Bayanihan appear mainly in agricultural matters, such as plowing, harrowing, sowing and harvesting. Taking an example observed by the author in *Mabiga* which is one of the case villages as illustrated in Figure 3, when a household needed labour for plowing their land presented in the upper picture of Figure 2, they asked other villagers to help in advance. And as a reward



Figure 2 : Bayanihan for plowing (upper) and a kitchen for serving meals to villagers helping plowing (lower) in Mabiga

Source: taken by the author in September, 2008

to their helping, the one asked help served lunch and dinner as shown in the lower picture in Figure 3 (in case that the household cannot afford to serve, villagers bring their meal by themselves).

This continuous labour exchange had been often seen in the Philippines. However, Bayanihan has disappeared in urban area and is disappearing even in some parts of rural area as well. It is declining mainly because of residents' start to work outside their villages (Kakuta 1994), spread of paid-work, mechanization, as mentioned later in this paper.

IV. Villages with Different Influence of the Employment Policy

This section introduces case villages and organizations of the study. The study sets its target area on unique villages in and around Subic Bay Freeport Zone (Subic), which have experienced different treatment from an economic development policy (employment policy) by the US navy which had been located in this area and a local government. The study seeks difference in particularized trust with the focus on decline of a traditional mutual support by the policy. The study conducted survey in three villages: **Kanawan**, **Pastolan** and **Mabiga** whose map is shown in Figure 3 and Table 1 presents detail information of three villages and organizations which the study analyzes later. The study make use of an interview in August, 2007 (residents in **Kanawan** and **Pastolan**); an interview and questionnaire survey in August and September, 2008 (in all of three villages), and a follow-up interview in July and August, 2010 (in **Pastolan** and **Mabiga**), and interviews with staff of Ecology Center, one of the local government sections, conducted during all of the survey periods above.

1. Pastolan

Pastolan now consists of Ayta (or Aeta: one of the indigenous peoples in the Philippines), Unat (the majority in the Philippines) and Mestiza/Mestizo (their mix: the former for women and the latter for men). **Pastolan** had been inside the site of US navy since 1902. During that time, Ayta had been protected as the indigenous peoples and hired as gate guardians, tour guides, and, in the period of Vietnam War, as trainees for the army to teach how to survive in jungle (Jungle Environmental Survival Training). During those days, only Ayta had gotten the permission to live in **Pastolan**.

Because Pinatubo volcano eruption brought about critic damage on the navy base including **Pastolan** (Shimizu 2003) and because the Upper House of the Philippines refused to conclude the new treaty about the US bases in the Philippines, the land of the base was

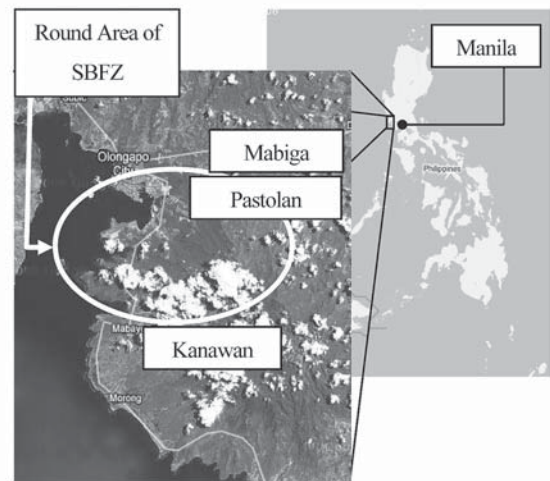


Figure 3: Maps of study villages

Source: Google Map

Table 1: Attribution of samples

Barangay*	Tipo	Binaritan	Mabiga
Population in Barangay (2007)	4,982	5,029	2,106
Case Village	Pastolan	Kanawan	Mabiga
Type of Village	Tribe**	Tribe**	Barangay
Population (2007)	1,084	287 (2004)	2,106
Number of Household (2007)	253	81 (2008)	N/A
Case Organization	PFCG	SAKANEKAN	MCFA
Establishment year	2004	2002	2003
Number of Household	70	81	65
Number of Sample Household	70	41	48
Number of men and women	24:46	4:36	25:21
Number of Ayta, Mestizo and Unat	27:24:19	21:2:18	0:0:48

*Barangay is the smallest administrative jurisdiction unit.

**Tribe is smaller than Barangay and Tipo Barangay and Binaritan Barangay consists of several tribes including Pastolan and Kanawan, respectively.

Source: The Republic of the Philippines, National Statistics Office, 2008; References in Ecology Center, SBMA; Interview with staff of Ecology Center, SBMA; Interviews with residents in Kanawan and Mabiga; Questionnaire survey held by author in August and September, 2008.

returned to the Philippines (Koshida 1993). With this as a start, the land of the ex-navy-base was designated as Subic Bay Freeport Zone (SBFZ) and Subic Bay Metropolitan Authority (SBMA: the local government) was institutionalized in 1992 to have jurisdiction over the land by Republic Act 7227. Since then, SBMA has been implementing policies to protect **Pastolan** where the indigenous peoples, Ayta, live.

However, settling down by non-Ayta had been prohibited, some of Unat have started to live in **Pastolan** even under the control of the US navy. At the present, only if Unat gets married with Ayta who lives in **Pastolan**, the Unat can live in **Pastolan** legally. Therefore, the **Pastolan** villagers consist of not only Ayta but also Unat and Mestiza/Mestizo.

SBMA implemented the policy to employ at least one person from every household in **Pastolan** in 1996, as forest rangers, staff of Pamulaklakin (tourism destination in SBFZ where tourists can see and experience Ayta's traditional life and wisdom), **Pastolan** Forest Conservation Group (PFCG) and so on. In addition, the World Bank had a project on **Pastolan**. Like above, **Pastolan** has been getting much support from outside institutes compared to other villages in the Philippines.

2. Kanawan

Kanawan also consists of Ayta, Unat and Mestiza/Mestizo. The present area of **Kanawan** was formed after eviction by which the then land of **Kanawan** had started to be used as a refugees' camp of Vietnam War. Even though they had to move other areas, they got no compensation. Moreover, when Pinatubo erupted, they had to get over without support from the government. Although Ayta has been living, **Kanawan** had gotten far less support from outside institutes than **Pastolan** had.

However, the establishment of SBMA triggered the change of its situation. Since implementation of the SBMA policy in 1996 which says to employ Ayta living in the SBFZ, some **Kanawan** residents has been also employed by SBMA as Forest Ranger, staff of aquarium in SBFZ and so on, because Ayta lives in **Kanawan**, even though **Kanawan** is located outside but near SBFZ.

3. Mabiga

A part of **Mabiga** is located inside SBFZ, however, **Mabiga** have not gotten support from the US navy or SBMA because only Unat lives. This village can be said as a village sharing many in commons with many other villages in the Philippines. In the Philippines, the economic difference between people having their own land and people without the land is getting wider, as mentioned as *Haves* and *Have-Nots* (Omas-as 2008). In **Mabiga** also the difference among residents reflects their economic situations. Residents with land (*Haves*) cultivate in their own land, but, on the other hand, residents without land (*Have-Nots*) established the community organization, MCFA (Mabiga Community Farmers Association), and cultivate in the common land of **Mabiga**.

Although residents in **Mabiga** had not been allowed to cultivate inside SBFZ, MCFA started cultivation inside SBFZ where SBMA had not taken any actions for reforestation. For SBMA, it was its benefit that the residents cultivated their land and, as a result, reforested the area. Therefore SBMA gave members of MCFA the right to cultivate the land and built a stage and a basketball court in the village center. But **Mabiga** did not get other support from SBMA and even from other institutions outside the village, but one NGO (Non-Governmental Organization). None of residents in **Mabiga** is hired by the SBMA policy.

Among residents in these three villages, the study conducted surveys to one organization of each village which is engaged in planting and reforestation and whose members do not have their private land but cultivate common land of the organization: PFCG (Pastolan Forest Conservation Group) in **Pastolan**, SAKANNEKAN (Association of Indigenous Negritos of Kanawan) in **Kanawan**, and MCFA (Mabiga Community Farmers Association) in **Mabiga**.

V. An Effect of the Employment Policy on Traditional Mutual Support

This section is to test the hypothesis 1 of this study. With interviews with the organization members, the hypothesis that the employment policy diminishes traditional mutual support systems is tested.

1. Decline of the traditional mutual support from employment policy in the villages

(1) Pastolan where Bayanihan had declines before SBMA's establishment

PFCG consists of 70 households (some households have two members employed as members so the total number of member is more than 70), and is engaged in reforestation in **Pastolan**. The origin of the organization is so-called utility group, who did whatever which does not need skills, organized by the project of the World Bank. In 2004, SBMA reorganized the group as PFCG with 6 subgroups, each of which has common land to plant and cultivate.

In **Pastolan**, Bayanihan has been declining according to interview with members of PFCG. The young tends to say Bayanihan has not declined, whereas, especially the aged people tended to say Bayanihan has declined. If comparing the frequencies when the aged people were kids with at the present, it is the consensus among the aged that Bayanihan has declined in **Pastolan**. Since members of PFCG employed by SBMA, said PFCG members, “members have our lands to work by ourselves (but they do not possess the lands)” and “each of us has our own (assigned) work. If I want to ask help as a form of Bayanihan on Saturday and Sunday, I can ask. But they (workers) like to take a rest on weekends.” This indicates that the employment policy caused decline of Bayanihan. In sum, it infers that the decline of Bayanihan has been proceeding for the long time, because residents had been employed by the US navy before the establishment of SBMA.

(2) Kanawan where the traditional mutual support have been declining since the employment policy

SAKANEKAN was organized by an NGO which used to support **Kanawan**. It consists of one member from each household, that is, 82 members in total. As of September, 2008, they plant only trees which they cannot consume for eating. The members got a payment in kind by another NGO for their work now.

Most of residents in **Kanawan**, who were interviewed in September, 2008, mentioned that Bayanihan has declined: “Since the start of employment by SBMA (in 1996), especially Unat started to require money when we asked their labour.”

(3) Mabiga where the traditional mutual support totally disappeared among ‘Haves’ and remains among ‘Have-nots’

MCFA, as mentioned above, consists of have-nots in **Mabiga**. The association consists of 65 members divided into seven subgroups. However, they do not have awareness that they are divided by subgroups. They are divided just to make easy writing reports and disseminating information, from the interview with the leader of MCFA.

In **Mabiga**, even though Bayanihan among the residents with lands (*Haves*) disappeared already because of farm mechanization and dissemination of paid work, “Bayanihan among MCFA members (*Have-nots*) has not declined at all,” all members of MCFA said, who were interviewed in September, 2008. They cannot afford to buy such machines, so their situation conserves Bayanihan.

(4) Different situation of the traditional mutual support among the villages

This series of interview showed that the employment policy of SBMA has changed their traditional society of the villages in terms of decline of Bayanihan. The study could not make numerical the change in frequency of Bayanihan, however, Figure 4 indicates these changes conceptually with attention to experience of past frequent Bayanihan compared to the present. According to Figure 4 and the hypothesis 2, clearly shown in Kanawan is that the younger they are, the lower particularized trust they have. In Pastolan, the relation is still can be seen but less clearly, and Mabiga would show no difference by age.

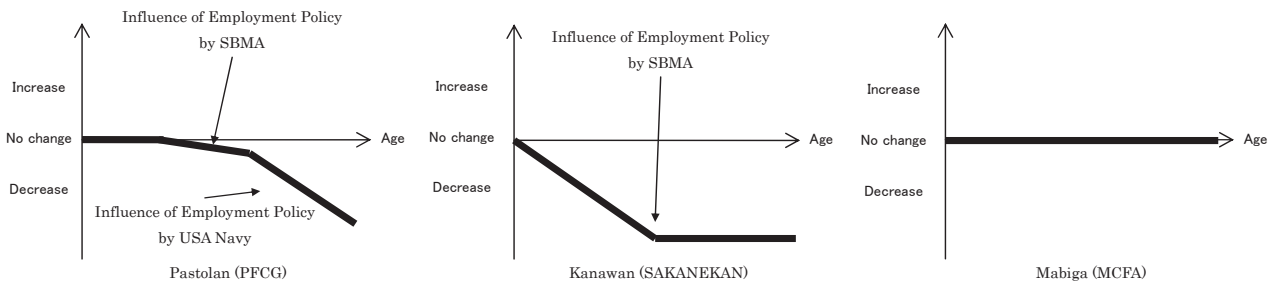


Figure 4: Conceptual relations between frequencies of Bayanihan of the past (early in life) and the present based on age

VI. Decline of Particularized Trust by Lacking Experience of Frequent Mutual Support

This section is to test the hypothesis 2 of this study. By the questionnaire surveys to the organization members, the hypothesis that the more Bayanihan declines in the villages, the more particularized trust in residents decline who did not experience frequent Bayanihan, is tested. The questionnaires were distributed to and collected from all households in PFCG (total sample: N=70) in August and September, 2008, in SAKANEKAN to members who stayed in **Kanawan** on one weekend in September, 2008(N=38), and in MCFA to members attended the monthly meeting of MCFA in September, 2008(N=46). Attributions of samples are shown in Table 1 shown in the section 4.

1. Independent Variables used for the analysis

To indicate influence of decline of Bayanihan on the particularized trust, this study sets “age” as a variable showing the experience of frequent Bayanihan. Age can indicate many other things, however, it is the most appropriate variable to explain the experience of frequent Bayanihan in this study. This study hypothesizes that much experience of frequent Bayanihan with other villagers keeps the particularized trust in other villagers, which stems from formation of and change in generalized trust, as Uslaner (2002) put it. If they supported each other so often in the past, they may tend to think many residents also help each other in the village at the present. A hypothesis in this analysis is “in **Pastolan** and **Kanawan**, the younger residents who have less experience of frequent Bayanihan are, the lower particularized trust they tend to have. On the other hand, in **Mabiga** without the difference in experience of frequent Bayanihan, the age does not say anything about the difference in particularized trust.”

Indices of the particularized trust, which ask trust in other (general) villagers in terms of helping, are quoted from some of questions of Grootaert’s work (Grootaert 2002). As you can see Table 2, questions have answers which do not identify who exactly, but say “neighbor and friends” in general in the answer 3, “acquaintances” in general in the answer 4, and so on. The questionnaires were checked by staff of Ecology Center, one of the SBMA’s sections, who is in charge of PFCG to make questions appropriate to PFCG. Even though questions were made based on the Pastolan’s situation, the three villages have many in commons so it could be assumed that the questions were appropriate in other two villages.

Table 2: Questions for measuring particularized trust in other residents

Variable	Questions Consisting of Particularized Trust	
Particularized Trust	If you suddenly have to go away for a day or two and have to leave your kids at home, whom could you count on to take care of your kids (If your children are not kids any more or you do not have any children, please imagine they were 5 years old and answer)?	
	Suppose you suffer an economic loss, say your house burned down. Who do you expect you can turn to for labor assistance to rebuild your house in this situation?	
	Suppose you and your neighbor have a fairly serious dispute with each other. Who do you think will primarily help resolve the dispute?	
Value	Choices for each Question	Point
Degree of Particularized Trust	1. No one in the village	0
	2. Relatives in the village	1
	3. Neighbors and friends in the village	2
	4. Acquaintances in the village	3
	5. Anybody in the village	4

Moreover, none of respondent showed difficulty to answer these questions, except for reading (many of them had difficulties to read questionnaires even written in Tagalog, the official language in the Philippines. So staff of Ecology Center and some residents who can read were asked to help respondents answer). Each question has the same choices and respondents get points according to their answers (the maximum point 12 indicates the highest particularized trust and the minimum point 0 means the lowest). Descriptive statistics of each village is shown in Table 3⁴⁾.

Table 3: Descriptive statistics of variables of each organization

Organization	PCFG		SAKANEKAN		MCFA	
Variable	Particularized Trust	Age	Particularized Trust	Age	Particularized Trust	Age
N	70		38		46	
Mean	6.26	41.41	6.50	40.63	5.33	39.30
Maximum	11	61	10	70	11	67
Minimum	3	26	3	22	3	17
Standard Deviation	2.41	10.13	2.20	11.41	1.79	13.63

It is easy to imagine some degree of frictions among races, in this study, among Ayta, Unat and Mestiza/Mestizo. But during the interviews and observations, nothing about frictions among races was mentioned by residents. So it has been decided not to include the particularized trust in different races in the questionnaire in order to ease respondents' burden for answering. Also gender is easily imagined to influence trust. Because of the small number of samples, the study cannot statistically analyze if it divides samples according to genders. Instead, the study analyzes differences in particularized trust and age between genders by nonparametric test to find if the data is influenced by gender difference. As Table 4 presents, the analysis could not find significant difference in each village. Therefore the study will not treat gender influence hereafter for the limited number of samples and no significant difference in dependent and independent variables between genders⁵⁾.

Table 4: Difference in particularized trust and age between genders

Organization	PCFG		SAKANEKAN		MCFA	
Gender	Male	Female	Male	Female	Male	Female
N	24	46	4	34	25	19
Mean of Particularized Trust	6.46	6.15	5.50	6.62	5.72	5.05
Significance Level	0.657		0.323		0.072	
Mean of Age	24	46	43.25	40.32	36.48	42.68
Significance Level	0.379		0.552		0.138	

Note: Nonparametric test: Independent samples (Mann-Whitney U test) Significance level is 0.05

2. Significant relation of age to particularized trust in PCFG and SAKANEKAN and no relation in MCFA

To test the hypothesis 2, the study make use of linear regression analysis (OLS [Ordinary Least Squares]) with age as a independent variable and particularized trust (point) as a dependent variable. Table 5 and Figure 6 show the statistical result of the case organizations.

The result of PCFG (in *Pastolan*), though it is not much clearly, indicates the trend that the more aged residents are, the higher particularized trust they have. The result of SAKANEKAN (in *Kanawan*) where Bayanihan declines rapidly, the analysis clearly infers that

Table 5: Regression statistics of each organization

Regression Statistics	PCFG	SAKANEKAN	MCFA
Multiple R	0.344	0.550	0.174
R Square	0.119	0.302	0.030
Adjusted R Square	0.106	0.283	0.008
Standard Error	2.281	1.866	1.782
Observations	70	38	46
Significance Level	0.004***	0.000***	0.249
Coefficients	0.082	0.106	-0.023
Standard Error	0.027	0.027	0.019

Note: Independent variable: age;

Dependent variable: particularize trust point

***: p<0.01

the more aged residents are, the more particularized trust they have, more clearly than that of PFCG. On the other hand, **Mabiga** does not show such the trend at all in Figure 7. The particularized trust scatters evenly regardless of age ⁷⁾.

The reason why the relation in PFCG is less clear than one in SAKANAKAN would be that **Pastolan** residents used to be employed by the US navy before SBMA establishment. The previous section also supports this statement by showing that the aged unanimously mentioned decline of Bayanihan, but it was not among the young. And another possible reason would be that PFCG members started a new custom that if *A* (member) cannot finish their own work in their assigned lands, *A* asks help to other members. And the next time when members who helped *A* cannot finish their work, *A* would help them back in turn. They also call this new type of labour exchange as 'Bayanihan.' This new type of Bayanihan may be able to help attribute high particularized trust to the young. And it can be thought that this would be a proof that residents still have the spirit of Bayanihan even in the decline of Bayanihan.

The analyses above inferred that the decline of the traditional mutual support (lack of experience of frequent mutual support) caused the decline of the particularized trust in other residents. It would be sure that the decline of the particularized trust in other residents hinders asking Bayanihan, and both of the declines of the particularized trust and Bayanihan have influence on each other. However, in the case villages, the original cause was the decline of Bayanihan by employment. So it is concluded that the initial effect was brought about by the employment policy, even though the decline of the particularized trust might reduce Bayanihan in return eventually.

VII. Conclusion

With unique two cases which have experienced life-style change in a short period and another without such the experience, this study demonstrated evidence shown in Figure 7 which infers that the employment policy had diminished the traditional mutual support systems, Bayanihan, followed by decline of residents' particularized trust in other residents in the same villages among residents without frequent Bayanihan practice, which was one of the important elements to promote residents' participation. With this result, the study also gave evidence that the particularized trust keeps long as generalized trust does. In conclusion, both of the hypotheses are accepted. As its implication from the findings, the study showed one case to answer the question if the prior economic oriented development, which essentially included modernization and start of employment in some areas, undermined the ground for participatory development which is one of the mainstreams of the present development study.

Even though these villages do not have approaches such as participatory process for their development yet, it seems inevitable that they will apply it sooner or later. Especially in **Pastolan**, SBMA staff teaches reforestation and how to write Tagalog as well as how to manage organizations which is a kind of process for capacity building. When outcomes of these activities come about, it is appropriate to let them manage their organizations by themselves, not only for residents

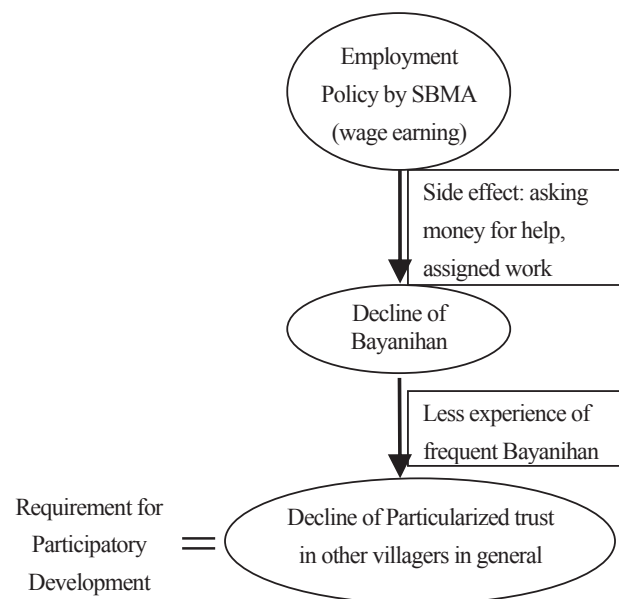


Figure 7: The finding in this study

Note: the right side in the figure indicates findings in the study and the letters in squares mean concrete reasons of causalities the arrows mean causalities

themselves but also for enabling to allocate the budgets and human resource of SBMA for other purposes.

The result of this study indicates the need to set some mechanisms which will not undermine residents' mutual support systems more in order to keep and the particularized trust for the future participatory approach in **Pastolan** and **Kanawan**, before people who have experienced frequent Bayanihan, cannot rely on Bayanihan anymore. One clue would be found in the new type of Bayanihan in PFCG with which the further study should tackle. In addition, the author has been attempting to find the same mechanism by another research method, or Gaming Simulation. Its findings are introduced in Toyoda, et al. (2011).

Acknowledgement

I would like to express our great thanks and respects to people who devoted their time to this study, especially residents in the three villages and to Mr. Edmond De Jesus (staff of Ecology Center in SBMA, Philippines) for his great support to this study. And I also would like to express my deepest gratitude to my advisory professor, Dr. Hidehiko Kanegae (Professor with the College of Policy Science, Ritsumeikan University) for his meaningful comments on my field research as well as on this paper. Finally but the least, I would like to appreciate useful comments from two anonymous referees.

In addition, without kind financial supports, this study could not have been achieved. I would thank all of the supports for this study: Support of Onsite Programs – Joint Research Projects (2007); Support for Study from the Institute of Policy Science (2007 and 2008); Haruyama Takako Memorial Scholarship (2008) and; Subsidy for Study and Research of the Foundation for the Fusion of Science and Technology (2010-2011).

List of Abbreviation

MCFA: Mabiga Community Farmers Association

PFCG: Pastolan Forest Conservation Group

SAKANIKAN: Association of Indigenous Negritos of Kanawan

SBMA: Subic Bay Metropolitan Authority

SBFZ: Subic Bay Freeport Zone

Notes

- 1) In this paper, participatory development does not mean just participation in development process where residents are supposed to participate in projects which are decided already by aid agencies (participation as method) but it means participation as objective to get residents' empowerment and capacity building (participatory approaches to development) (Saito 2002, Sato 2003).
- 2) Kakuta (1994) shows the case in the Philippines.
- 3) The importance to keep the original or unique social capital (including trust) is widely recognized, such as by World Bank, saying its programs not to weaken the existing positive social capital (World Bank 1998, Miyagawa 2004).
- 4) This study omits two samples in SAKANIKAN considered as outliers identified in making the box and whisker plot: (age, particularized trust point) = (44, 9) and (50, 10). But even if including these samples, the significance of the result does not change. Also it omits one sample which seems to answer the best choices in all questions: (age, particularized trust point) = (32, 12). However, excluding these samples does not affect statistical significance in the analyses explained later.
- 5) Two samples in MCFA did not answer their genders. Therefore the breakdown has less sample numbers than the total.
- 6) This analysis omits one samples considers as outliers which takes the maximum point in particularized trust in all of three villages and located in an isolated place on the graph: (32,12). But even if including this sample, the significance of the result does not change.
- 7) As can be seen in figure 5-7, residents of MCFA seem to have the lowest particularized trust among the target organizations. This study pays attention only to difference among residents in each village and not to difference among villages. Therefore, nor important is this difference among villages to the study, it cannot analyze the difference.

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